

How to Cite:

Qosidah, N., Chandrarin, G., & Respati, H. (2022). The accounting information system to enhance innovative performance on corporate performance influence of carved furniture in Jepara Regency. *International Journal of Health Sciences*, 6(S4), 320–338.
<https://doi.org/10.53730/ijhs.v6nS4.5518>

The Accounting Information System to Enhance Innovative Performance on Corporate Performance Influence of Carved Furniture in Jepara Regency

Nanik Qosidah

Doctorate Program of Economic Science of Universitas Merdeka Malang,
Indonesia
Email: qosidah16@gmail.com

Grahita Chandrarin

The Director of Postgraduate School of Universitas Merdeka Malang, Indonesia
Email: grahitac@unmer.ac.id

Harianto Respati

The Program Study Chief of Master of management Universitas Merdeka Malang,
Indonesia
Email: Patidarma@yahoo.com

Abstract---This research analyzed the innovative performance toward corporate performance by examining the accounting information system to enhance the correlation between innovative performance and the corporate performance of carved furniture in Jepara. The applied research design was quantitative research with primary and secondary data sources. The sample consisted of the leaders, directors, or owners of the carved furniture corporation in Jepara. The numbers of the sample were 174 respondents, taken with quota sampling technique. The research analysis used Moderating Regression Analysis to explain that innovative performance could improve corporate performance. Besides that, the informative system could enhance the correlation between innovative performance and corporate performance. However, the researchers still found some corporations that did not use the accounting information system maximally. Thus, the accountability was not efficient and effective.

Keywords---accounting information system, innovative performance, and corporate performance.

Introduction

Corporate performance refers to an action or organizational activity within a certain period. The action is projected as the principles of efficiency, responsibility, and managerial accountability (Srimindarti, 2004). Arimbawa & Putri (2014) found that the improved corporate performance occurred due to innovation support and survivability during the competition. Corporate performance is a comprehensive situation display of a corporation within a certain period (Tuan et al., 2016).

A corporation with excellent performance evaluation means that the mechanism of the corporate needs run successfully (Anthony & Govindarajan, 1998:214). Tuan *et al.*, (2016); Sdiri *et al.*, (2010); & Bigliardi (2013) explain that corporate performance improvement relied on innovative contribution. Ahmed & Shepherd (2010) explain that innovation does not only deal with goods or products, but also life attitudes, behaviors, and movements to change.

Birkinshaw *et al.*, (2008) argue that most studies only focus on technology and innovation aspects, such as product and process innovations. Innovation, in a managerial context, refers to the invention and implementation of managerial practices, processes, structures, and new techniques based on the organizational goals (Tange et al., 1997). Thus, based on the explanation, the previous studies about innovative performance defined it as adjustment and implementation to create new ideas, such as products, services, processes, and managerial practices based on the organizational purposes and information system.

The accounting information system refers to an application to support the operational process of an organization. The system is an integrated data processing unit to complement and produce some outputs in the forms of figures and sounds (Dillon & Kruck, 2004). The accounting information system is a process of collecting, processing, storing, analyzing, and distributing information for specific interests. Tanriverdi (2005) argues that an accounting information system can improve corporate performance.

Sabherwal *et al.*, (2006); Petter *et al.*, (2008); Ferreira & Cherobim (2012) also argue that accounting information systems contribute to the improvement of corporate performance. Corporate performance is vital for an organization to maximize the adjustment and effectiveness of the measurement. A corporation can do it by organizing, identifying the stages, and reflecting the corporate performance (Neely et al., 2000). Heretofore, corporate performance measurement only uses traditional performance with emphasis on the financial sector.

Some researchers argue that non-financial indicator also reflects the investment and performance of real aspects. This indicator is also excellent to predict future financial performance (Epstein & Manzoni, 1997). Non-financial units cannot separate the financial units. They are complementary (Kaplan & Norton, 2000). Non-financial-based corporate performance measurement had a direct correlation with changes, business environmental situations, and exclusive behavior.

A strong correlation among product, process of innovation, and study, according to Freel (2003); Gopalakrishnan et al., (1999); Lager & Horte (2002); Michie dan Sheehan (2003); Papadakis & Bourantas (1998); Sternberg & Arndt (2001) is a different process and product of innovation by following different processes. Michie & Sheehan (2003) explain that process of innovation could have both positive and negative contributions. Besides that, the process of innovation needs an information system that provides an opportunity to improve performance. juga Stacey & Aston (1990); Bharadwaj (2000); Zahra & Covin (1993) argue that technological advancement plays an important role to reach long-term profitability. Then, it can improve the operational performances, such as the speed of production, the decrease of defective products, the improvement of operational performance, the improvement of punctual delivery, and the improvement of productivity.

In 2017, the objective of export countries was to reach 113 countries with volumes equal to 118.44.670,96 or 278,894,354.87 USD. In 2018, the export country experienced the increased volumes of the targeted countries, from 113 to 117 with export volumes of 84.451.879,00 or 347,409,178.75 USD. The volume indicated an increased volume. However, in 2019, the volume decreased into 80.127.123,66 or 338,300,726.23 USD.

Some previous studies about corporate performance within the financial sector had different results. Sartika (2015) found that corporate performance with the financial sector gained influences from technological innovation. Akpoviroro et al (2021) found that process innovation could visualize corporate performance. Kijkasiwat & Phuensane (2020) argued that corporate capital could moderate the correlation between the process of innovation and corporate performance. Hartini (2012) found that process of innovation did not influence corporate performance. Le et al (2020) found that accounting information systems moderated innovation management and corporate performance. Innovation capability mediated innovation management and corporate performance. Thus, the capability guided the researchers back to the accounting information system as the moderator. From the phenomena of the background, this research analyzed innovative performance toward corporate performance. Then, the researchers examined the accounting information system as the moderator.

The Theoretical Principles

a. Corporate Performance

Performance refers to a work of an individual or a group of people within a corporation based on their authority and responsibilities. The works of the people are important to realize the corporate objectives legally based on the applied law, morals, and ethics (Rivai & Basri, 2004).

A corporation that separates the management and ownership functions will probably encounter agency conflict due to the conflict of interest. Each conflicting party aims to make itself prosperous (Jensen & Mecking, 1976). Sari & Zuhrotun (2006), with the signal theory, explain the reason a corporation is encouraged to provide financial statements for external parties. Oliveira et al. (2018) found that the insignificant corporate performance improvement occurred due to innovation. Zhang et

al., (2018) and Santos et al., (2014) explain that innovation could improve corporate performance. Andez & Gonz (2018) argue that innovation can improve corporate performance within the non-financial sector. Lewandowska & Biowski, (2016); Lee & Garrett (2017); Gonzalez & Velasco, (2018); Wadho & Chaudhry, (2018); Rajapathirana & Hui, 2018;

Zhang et al., (2018) found a correlation between innovation and the performance of manufacturing corporations. Kimathi *et al.*, (2015) found that corporate performance is an important indicator of capital structure influence during their literature review work. Hansen (2005) explains that corporate performance is important for management. Majali *et al.*, (2012) explain that corporate performance measures the achieved objectives of a corporation. Sdiri *et al.*, (2010) explain that process of innovation improved corporate performance. Buckova & Zizlavsky (2016) found improved corporate performance with the support of marketing performance. This correlation facilitated the corporation to keep advancing and growing.

b. Innovative Performance

Chesbrough (2003) argues that innovative performance is important for a corporation. Birkinshaw *et al.* (2008) argue that most studies only focus on technology and innovation aspects, such as product and process innovations. Innovative performance refers to an invention and implementation. Saunila (2017) explains seven items to measure innovative performance. Janssen *et al.* (2017) explain that innovative performance is measurable from the intention, promotion, and relevant ideas with the applied job regulation, task team, and effort of the corporation to gain profits. Saleksa & Firmansyah (2014) examined the corporate performance with innovation, product innovation, the process of innovation, and marketing innovation. Suryana (2014:54) explains that innovation refers to the implementation of creativity into an implementable matter that provides added value upon the existing resources. Soleh (2015) classified the innovation of some types. Gunday *et al.* (2011) found that significant corporate performance occurred due to innovative performance that went based on the plans. Kemp & Wubben (2003:33) found that innovative performance percentage improvement occurred due to corporate performance.

From the previous studies, the researchers were motivated to re-review the measurement of innovative performance with some indicators of product innovation, the process of innovation, marketing innovation, and organizational innovation based on the research subjects, the business doers in Jepara Regency, especially those from carved furniture industries with exporting activities. Here are the proposed research hypotheses.

H₁: innovative performance influences the corporate performance

c. Accounting Information System

Puspitawati & Anggadini (2011) explain that an information system is a daily organizational system to support the daily operating activities. Suwardjono (2005) explains some knowledge instruments to learn to engineer and provide services in the form of quantitative financial information of the organizational units within an environment. Mulyadi

(2008:5) explains the system includes a procedural network made based on an integrated pattern to promote the corporate main activities. Mulyadi (2008:5) explains that procedure refers to a series of clerical activity orders. It involves some people in a department or more departments to guarantee the handling in a uniform manner of repeated corporate transactions.

Diana & Setiawati (2011:40) consist of various related activities with a cycle of the corporate accounting process. Although there are no two identical organizations, most organizations encounter the same economic phenomenon. Azhar (2017:80) defines that accounting information system as an integrated sub-themes or physical and non-physical component system. The system is intercorrelated and works. Bodnar & Hopwood (2010:1) explain that an accounting information system refers to a series of resources, such as human and designed tools to change the financial data and other data into information. Quintero et al. (2015) found the improvement of corporate performance due to some supporting information and innovation within appropriate technologies, information management, accounting information system, and corporate performance.

Meiryani (2015) found that information systems could improve business performance. Delawi & Ramo (2020) found that policymakers could focus on making decisions due to the excellent accounting information system. Sartika (2015) described the influence of organizational innovation and technological innovation on organizational performance. Sari & Purwanegara (2016) explain that accounting information system goes along with the corporate objectives due to the factors of *organizational behavior, implementation intern control, organizational structure, organizational commitment, infrastructure information technology, e-commerce, and leadership style*.

Dmour et al. (2017) discuss the improved accounting information system due to corporate performance. Boritz (2005) also found that an accounting information system built from the integrated system could be an excellent system framework for a corporation. The accounting information system has an important role to support or enhance innovative performance improvement toward corporate performance. Thus, higher innovative performance will improve corporate performance, especially within the financial sector. From the explanations, the second hypothesis is:

H₂: the accounting information system strengthens the correlation between innovative performance toward corporate performance.

Previous Studies

Wang & Wang (2012) found that process innovation could improve corporate performance. Rosli & Sidek (2020) examined the process of innovation and product innovation toward corporate performance. The results explained that corporate performance improvement occurred due to the contributions of the process of innovation. The same thing also happened for product innovation. Tuan et al. (2016) discuss the effects of innovation on firm performance of supporting industries. Sdiri et al. (2010) examined the innovation, performance, and service sector. The results explained that innovation had an important role to

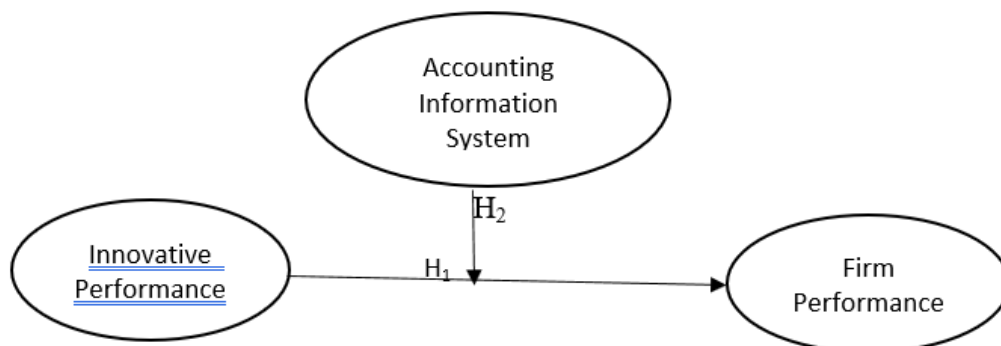
improve corporate performance, especially within the service sector. Bigliardi (2013) examined the financial performance of food machinery and innovation. The results showed that improved innovation led to corporate performance improvement. Guday et al. (2011) examined innovation, product process, and corporate performance. The findings explained that product process and innovation improved corporate performance.

Birchall *et al.* (2011) examined innovation, performance, and measurement. The results showed that corporate performance with emphasis on the process could reach the maximum outcomes. Quintero et al. (2015) examined the harmony of technological alignment, management information, innovation, accounting information system, and productiveness. Le et al (2020) examined the organizational culture, accounting information system, and innovative performance influences toward corporate performance. The findings explained that the accounting information system moderated the correlation between organizational culture and innovative performance toward corporate performance. Kareem et al. (2020) examined the role of information systems that moderated managerial knowledge and organizational performance toward corporate performance. The results explained that an accounting information system could moderate the correlation between managerial knowledge and organizational performance toward corporate performance.

The Research Conceptual Framework

The empirical studies by some researchers explained that corporate performance was built from some variables, such as the process of innovation, innovative performance, and accounting information system. Corporate performance should have an outcome and report orientation within a certain period and could be accounted for. Hill (2008:11) defines innovative performance as the action of adding values to certain objects. The innovative performance of the furniture industries in Jepara got lower, especially in terms of the designing process. The furniture designs needed to be consistent. It is also applied in the production results that should have to be customer-oriented. In the present day, technological advancement influences the traditional furniture industries although they have unique specific features. From the explanations, the research conceptual framework is:

Figure 1. The Research Conceptual Framework



Research Method

The applied research design was quantitative research. This design explains the causal-comparative correlation with some hypotheses to examine statistically. This design also describes each investigated variable. Sanusi (2011) and Kuncoro & Sudarman (2018) explain that causal research design allows researchers to investigate the causal-comparative correlations among variables. The quantitative research and explanatory research designs are useful to determine the clarity of the exogenous and endogenous variable influences and explain each variable of the phenomenon based on the respondents' perceptions.

Population and Sample

Based on the data of the Industrial and Commercial Institution of Jepara Regency in 2019, Jepara had 307 corporations that met the five-previously mentioned criteria. Thus, the researchers determine the research analysis unit, the organizations, or the corporations. In this research, one individual represented a unit. This individual had to understand the investigated measurement. The representative individuals of the corporations became the research respondents. The investigated respondents were the owners, leaders, managers, or directors. In this position, most respondents understood the related corporate conditions with the implementation of innovation, accounting information system function, and investigated corporate measurements. Thus, the research population consisted of 307 corporations. The sampling technique was quota sampling by considering each selected corporation randomly with equal opportunities. The researchers determined the sample with Slovin's formula and by applying the error level, 5% for all economic sectors. Based on the calculation of Slovin's formula, the researchers determined the research sample to be 174 respondents.

Data Collection

The researchers collected the data with a guided-questionnaire survey for the respondents. They were the carved furniture owners in Jepara. The questionnaire results were the respondents' answers in the form of statements and perceptions of the measured variables. The arranged questionnaire was given directly and indirectly for the respondents to get accurate information about innovative performance, accounting information systems, and corporate performance.

Results and Discussion

Descriptions of the Respondents

The research respondent descriptions explain the respondents' conditions, see Table 1.

Years of business	Numbers of corporations	Percentage
a. 5 years	46	26.4
b. More than 5 years	128	73.6

Total	174	100
--------------	------------	------------

Source: the processed primary data, 2022

Most respondents had longer years of service to start operating their productions. Thus, they were aware of solving various problems about carved furniture. Besides that, the experience of the business doers made the industries could survive from many challenges and maintain the corporate performances, including the production performance, marketing performance, and financial performance. The same matter also goes for Table 2 below.

Table 2. The characteristics of the respondents based on the business types

Business types	Numbers of corporations	Percentage
1. Carved furniture	76	43.7
2. Carved furniture	98	56.3
Total	174	100

Source: the processed primary data, 2022

The respondents with skills to develop the carving technique adjusted the skills with the specific features of Jepara. The carving technique of Jepara has some uniqueness and is observable by the national and worldwide community. The carved furniture in Jepara still kept the carving techniques from generation to generation.

The test instrument

Based on the validity test, the research instrument result showed the r-count value was higher than r-table for $n = 174$, $\alpha = 5\%$, and $df=98$ ($174-2$). It was 0.144. Thus, the research instruments were valid and could measure the variables. The reliability test, with Cronbach Alpha, for each variable, were: innovative performance with 0.754, accounting information system with 0.762, and corporate performance with 0.610. All Cronbach Alpha results are higher than the alpha value, 0.600. Thus, all variables were reliable.

The multiple regression linear equation

The regressive coefficient value of innovative performance had a positive value, 0.121. It showed the significant and positive influence of corporate performance as a variable. Thus, if the innovative performance was improved, then the corporate performance would also improve.

The Moderating Regression Equation

Table 2. The Regressive Coefficient Result of Taxpayer Commitment, Tax Amnesty, and Tax Compliance

Variable	Coefficient	t	Sig.
(Constant)		1,071	0.00
Innovative Performance	0.772	1,814	0,000
Accounting Information System*Corporate Performance	0.623	2,115	0,011

Source: Primary data, 2021

The regressive coefficient of innovative performance is 0.722. It explains the scoring chance of the system due to innovative performance toward corporate performance. The positive value indicates a linear comparison. Thus, higher innovative performance leads to higher corporate performance. It proves that adequate tax innovative performance leads to excellent corporate performance.

The moderating variable test shows the interaction of innovative performance variables and accounting information systems with significant influence on corporate performance. The evidence is the probability score of both variable interactions, 0.011 or 1%, is lower than 0.05. The comparison confirms the taxpayer's commitment toward tax compliance. Thus, the accounting information system strengthens innovative performance toward corporate performance.

Determinant Coefficient

The determination coefficient, R^2 , is useful to measure the capability of a model to explain variances of the dependent variables. The influence of innovative performance toward corporate performance moderated by accounting information system is observable from the correlation score and the determination coefficient, R^2 , as shown in Table 3.

Table 3. The determination coefficient result of innovative performance and corporate performance

Model	Adjusted R Square
1	.481

Source: Primary data, 2021

The influence of innovative performance toward corporate performance moderated by accounting information systems is observable from the determination coefficient, R^2 . The obtained results of innovative performance are 0.481 (48.1%) while the remaining percentage, 51.9%, is influenced by other unobserved variables.

Discussion

Innovative performance refers to corporate roles to develop certain sectors, such as product innovation and innovative organization. Essentially, innovative performance refers to finding and implementing managerial practices, processes, structures, and techniques with clear organizational objectives.

Innovative performance is reflected by innovative products with regular corporate appreciation, improved raw material components, and new added values to facilitate product development. The innovative process got appreciation from the corporations by developing new products with different specifications, new components, and different raw materials.

Innovative performance is reflected by marketing innovation appreciation by improving the knowledge to improve the sales, apply the knowledge, and select some processes to gain new knowledge. Innovative organization refers to the constructive reflection of innovative performance with corporate appreciation to construct new knowledge and ideas continuously.

The accounting information system is an organized system to support daily activities and managerial activities. Organizational activities provided some parties needed by the corporations. An accounting information system is reflected by the reliability, efficiency, and effectiveness of financial reports within the operational and regulatory compliances. Accounting information system would be maximum if it gains support from excellent resources, procedures, and professional activities and management.

Corporate performance refers to the capability of a corporation to manage the resources and to provide values for the corporations. Corporate performance could be achieved by an individual or a group within an organizational environment based on their authority and responsibilities. Production performance, marketing performance, and financial performance reflected corporate performance. The contribution to improving the accounting information system is explained by high innovation. A high innovation process occurs due to high innovation supports to improve the accounting information system. This system refers to applied instruments for working efficiently and effectively.

An accounting information system is reflected by the reliability, efficiency, and effectiveness of financial reports within the operational and regulatory compliances. An accounting information system is supported by regulation compliance with managerial control interpretation to determine the policy of corporate operational activities. The findings explained that product process and innovation improved corporate performance. An accounting information system is important to improve corporate performance with market performance support. It proves that corporate performance improves, seen from the marketing performance and supports of the accounting information system reflected in regulation compliance.

Regulation compliance refers to a situation in which a corporation obeys the corporate strategies to make decisions. Quintero *et al.* (2015); Delawi & Ramo

(2020) and Fagbemi & Olaoye (2016) explain that accounting information system has a vital role to improve corporate performance. Puspitawati & Anggadini (2011); Suwardjono (2005), and Mulyadi (2008) argue that an accounting information system is a structured component based on the procedure. Thus, it could create clerical activities to record various information to support the accounting information activities.

Innovative performance could improve corporate performance. Besides the process of innovation and innovative performance, the innovative performance also received support from the accounting information system. Accounting information system has both direct and indirect roles to improve corporate performance.

Wang & Wang (2012); Rosli & Sidek (2020); Masso & Vahter (2015), and Akgun *et al.* (2009) found that process innovation could improve corporate performance. In this research, the researchers found that innovative performance could contribute to improving corporate performance mediated by accounting information systems. Janssen *et al.* (2017) and Saleksa & Firmansyah (2014) also found that corporate performance was the combination of high innovation and low innovation so that the combined skills covered the production elements with new methods.

Conclusion and Suggestion

Conclusion

Innovative performance is built from innovative products, the process of innovation, marketing innovation, and innovative organization. On the other hand, the dominant role of marketing innovation with corporate representation is to apply knowledge to improve sales.

An accounting information system is reflected by the reliability, efficiency, and effectiveness of financial reports within the operational and regulatory compliances. The dominant roles of efficiency and effectiveness with the policy statement are applied to encourage the compliance of managerial policies. Production performance, marketing performance, and financial performance reflected corporate performance. The dominant role of marketing performance on the leader statement information was about the quality adjustment of the subordinates' works.

Suggestion

The researchers recommend future researchers conduct studies about accounting information systems empirically to strengthen the correlation between the process of innovation and innovative performance toward corporate performance with the respondent, the owners of carved furniture in Jepara. The researchers expect future researchers to develop and add the respondents to make further studies comprehensive.

Bibliography

- Ahn, J. M., Ju, Y., Moon, T. H., Minshall, T., Probert, D., Sohn, S. Y., & Mortara, L. (2016). Beyond absorptive capacity in the open innovation process: the relationships between openness, capacities and firm performance. *Technology Analysis and Strategic Management*, 28(9), 1009–1028. <https://doi.org/10.1080/09537325.2016.1181737>
- Akgün, A. E., Keskin, H., & Byrne, J. (2009). Organizational emotional capability, product and process innovation, and firm performance: An empirical analysis. *Journal of Engineering and Technology Management - JET-M*, 26(3), 103–130. <https://doi.org/10.1016/j.jengtecman.2009.06.008>
- Al-Delawi, A. S., & Ramo, W. M. (2020). The impact of accounting information system on performance management. *Polish Journal of Management Studies*, 21(2), 36–48. <https://doi.org/10.17512/pjms.2020.21.2.03>
- Al-dmour, A., Al-Fawaz, K. M., Al-dmour, R., & Allozi, N. M. (2017). Accounting Information System and Its Role on Business Performance: A Theoretical Study. *Journal of Management and Strategy*, 8(4), 79. <https://doi.org/10.5430/jms.v8n4p79>
- Atalay, M., Anafarta, N., & Sarvan, F. (2013). The Relationship between Innovation and Firm Performance: An Empirical Evidence from Turkish Automotive Supplier Industry. *Procedia - Social and Behavioral Sciences*, 75, 226–235. <https://doi.org/10.1016/j.sbspro.2013.04.026>
- Aykan, E., & Aksoylu, S. (2013). Effects of Strategic Management Accounting Techniques on Perceived Performance of Businesses. *Journal of US-China Public Administration*, 3(7), 30–39.
- Becheikh, N., Landry, R., & Amara, N. (2006). Lessons from innovation empirical studies in the manufacturing sector: A systematic review of the literature from 1993-2003. *Technovation*, 26(5–6), 644–664. <https://doi.org/10.1016/j.technovation.2005.06.016>
- Bigliardi, B. (2013). The effect of innovation on financial performance: A research study involving SMEs. *Innovation: Management, Policy and Practice*, 15(2), 245–255. <https://doi.org/10.5172/impp.2013.15.2.245>
- Birchall, D., Chanaron, J. J., Tovstiga, G., & Hillenbrand, C. (2011). Innovation performance measurement: Current practices, issues and management challenges. *International Journal of Technology Management*, 56(1), 1–20. <https://doi.org/10.1504/IJTM.2011.042492>
- Birkinshaw, Julian & Hamel, Gary & Mol, Michael. (2008). Management innovation. *Acad Manage Rev. The Academy of Management Review*. 33. 10.5465/AMR.2008.34421969.
- Bockova, N., & Zizlavsky, O. (2016). Innovation and financial performance of a company: A study from Czech manufacturing industry. *Transformations in Business and Economics*, 15(3), 156–175.
- Bodnar, Georfe H and William S. Hopwood, (2010). *Accounting Information System*. 10th edition. United State Of America: Pearson Education Inc.
- Boritz, J.. (2005). IS practitioners' views on core concepts of information integrity. *International Journal of Accounting Information Systems*. 6. 260-279. 10.1016/j.accinf.2005.07.001.
- Brettel, M., Mauer, R., Engelen, A., & Küpper, D. (2012). Corporate effectuation: Entrepreneurial action and its impact on R&D project performance. *Journal of*

- Business Venturing, 27(2), 167–184.
<https://doi.org/10.1016/j.jbusvent.2011.01.001>
- Canh, N. T., Liem, N. T., Thu, P. A., & Khuong, N. V. (2019). The impact of innovation on the firm performance and corporate social responsibility of Vietnamese manufacturing firms. *Sustainability (Switzerland)*, 11(13).
<https://doi.org/10.3390/su11133666>
- Cetindamar, D., & Ulusoy, G. (2008). Innovation performance and partnerships in manufacturing firms in Turkey. *Journal of Manufacturing Technology Management*, 19(3), 332–345. <https://doi.org/10.1108/17410380810853768>
- Cherrafi, A., Garza-Reyes, J. A., Kumar, V., Mishra, N., Ghobadian, A., & Elfezazi, S. (2018). Lean, green practices and process innovation: A model for green supply chain performance. *International Journal of Production Economics*, 206, 79–92. <https://doi.org/10.1016/j.ijpe.2018.09.031>
- Chesbrough, Henry. (2003). *Open Innovation: The New Imperative for Creating and Profiting From Technology*.
- Cho, H. J., & Pucik, V. (2005). Relationship between innovativeness, quality, growth, profitability, and market value. *Strategic Management Journal*, 26(6), 555–575. <https://doi.org/10.1002/smj.461>
- Chowdhury, N. C., Murphy, B., Sayegh, M. H., Hardy, M. A., & Oluwole, S. F. (1997). Induction of transplant tolerance by intrathymic inoculation of synthetic MHC class I allopeptides. In *Transplantation Proceedings (Vol. 29, p. 1136)*. [https://doi.org/10.1016/S0041-1345\(96\)00469-1](https://doi.org/10.1016/S0041-1345(96)00469-1)
- Chowdhury, N. C., Murphy, B., Sayegh, M. H., Hardy, M. A., Oluwole, S. F., Rogers, E. M., ... Nordhaus, W. D. (2019). Innovation and firm performance. *International Journal of Production Economics*, 10(2), 35–78. <https://doi.org/10.1108/17410380810853768>
- Chin, Wynne & Marcoulides, G.. (1998). *The Partial Least Squares Approach to Structural Equation Modeling. Modern Methods for Business Research*. 8.
- Darroch, J. (2005). Knowledge management, innovation and firm performance. *Journal of Knowledge Management*, 9(3), 101–115. <https://doi.org/10.1108/13673270510602809>.
- Dodgson, M., & Hinze, S. (2000). Indicators used to measure the innovation process: Defects and possible remedies. *Research Evaluation*, 9(2), 101–114. <https://doi.org/10.3152/147154400781777368>
- Dreschler, G., & Los, B. (2011). Book Review: Book Review. *Journal of English Linguistics*, 39(2), 188–192. <https://doi.org/10.1177/0075424211405980>
- Dziallas, M., & Blind, K. (2019). Innovation indicators throughout the innovation process: An extensive literature analysis. *Technovation*, 80–81(May), 3–29. <https://doi.org/10.1016/j.technovation.2018.05.005>
- Elali, Wajeeh & Gitman, Lawrence & Zutter, Chad & Roubaie, Amer. (2013). *Principles of Managerial Finance*.
- Epstein, M., & Manzoni, J. F. (1998). Implementing corporate strategy: From tableaux de bord to balanced scorecards. *European Management Journal*, 16(2), 190–203. [https://doi.org/10.1016/S0263-2373\(97\)00087-X](https://doi.org/10.1016/S0263-2373(97)00087-X)
- Ettlie, J. E., & Reza, E. M. (1992). Organizational integration and process innovation. *Academy of Management Journal*, 35(4), 795–827. <https://doi.org/10.2307/256316>
- Fagbemi, T. O., & Olaoye, J. A. (2016). An Evaluation Of Accounting Information System And Performance Of Small Scale Enterprises In Kwara State , Nigeria. *DBA African Management Review*, 6(1), 1–16.

- Freel, M. S. (2003). Sectoral patterns of small firm innovation, networking and proximity. *Research Policy*, 32(5), 751–770. [https://doi.org/10.1016/S0048-7333\(02\)00084-7](https://doi.org/10.1016/S0048-7333(02)00084-7)
- Fontana, Avanti. (2011). *Manajemen Inovasi dan Penciptaan Nilai*. Jakarta. Cipta Inovasi Sejahtera.
- Gopalakrishnan, S., Bierly, P., & Kessler, E. H. (1999). A reexamination of product and process innovations using a knowledge-based view. *Journal of High Technology Management Research*, 10(1), 147–166. [https://doi.org/10.1016/S1047-8310\(99\)80007-8](https://doi.org/10.1016/S1047-8310(99)80007-8)
- Gopalakrishnan, Subramaniam, Vadlamudi, S., Bandikinda, P., Sathya, A., Vijayabharathi, R., Rupela, O., ... Varshney, R. K. (2014). Evaluation of *Streptomyces* strains isolated from herbal vermicompost for their plant growth-promotion traits in rice. *Microbiological Research*, 169(1), 40–48. <https://doi.org/10.1016/j.micres.2013.09.008>
- Gunday, G., Ulusoy, G., Kilic, K., & Alpkan, L. (2011). Effects of innovation types on firm performance. *International Journal of Production Economics*, 133(2), 662–676. <https://doi.org/10.1016/j.ijpe.2011.05.014>
- González-Fernández, Marcos and González-Velasco, Carmen, *Innovation and Corporate Performance in the Spanish Regions* (2018). *Journal of Policy Modeling*, vol. 40, núm. 5, págs. 998-1021. I.S.S.N.: 0161-8938, 2018, Available at SSRN: <https://ssrn.com/abstract=3400357>
- Hagedoorn, J., & Cloudt, M. (2003). Measuring innovative performance: Is there an advantage in using multiple indicators? *Research Policy*, 32(8), 1365–1379. [https://doi.org/10.1016/S0048-7333\(02\)00137-3](https://doi.org/10.1016/S0048-7333(02)00137-3)
- Hansen, J., et al. (2005), Efficacy of climate forcings, *J. Geophys. Res.*, 110, D18104, doi:10.1029/2005JD005776.
- Hashi, I., & Stojčić, N. (2010). The impact of innovation activities on firm performance using a multi-stage model.
- Hernandez-Gonzalez, J., Inza, I., & Lozano, J. A. (2019). A Note on the Behavior of Majority Voting in Multi-Class Domains with Biased Annotators. *IEEE Transactions on Knowledge and Data Engineering*, 31(1), 195–200. <https://doi.org/10.1109/TKDE.2018.2845400>.
- Hill, C. (2008), "International Business: Competing in the Global Market Place", *Strategic Direction*, Vol. 24 No. 9. <https://doi.org/10.1108/sd.2008.05624iae.001>
- H. M. Le, T. T. Nguyen, and T. C. Hoang, "Organizational culture, management accounting information, innovation capability and firm performance," *Cogent Bus. Manag.*, vol. 7, no. 1, 2020, doi: 10.1080/23311975.2020.1857594
- Janssen, M., Konopnicki, D., Snowdon, J. L., & Ojo, A. (2017). Driving public sector innovation using big and open linked data (BOLD). *Information Systems Frontiers*, 19(2), 189–195. <https://doi.org/10.1007/s10796-017-9746-2>.
- Jaskyte, K. (2006). Focus on Seminal Nonprofit Management Issues Predictors of Administrative and Technological Innovations 77.
- Joseph F. Hair Jr. William C. Black Barry J. Babin Rolph E. Anderson Hair, J *Multivariate Data Analysis*. Seventh Edition. United States of America.
- Jong, Jeroen & Kemp, R. & Folkeringa, Mickey & Wubben, Emiel. (2003). *Innovation and firm performance*. EIM Business and Policy Research, Scales Research Reports.
- Joreskog, K. G., & Sorbom D. (1989). *LISREL 7: A Guide to the Program and Applications*. Chicago: SPSS, Inc.

- Kearns, G. S., & Sabherwal, R. (2006). Strategic alignment between business and information technology: A knowledge-based view of behaviors, outcome, and consequences. *Journal of Management Information Systems*, 23(3), 129–162. <https://doi.org/10.2753/MIS0742-1222230306>
- Kemp, R. & Jong, & Folkeringa, M. & Wubben, Emiel. (2003). Innovation and firm performance: differences between small and medium-sized firms.
- Kimathi, Mukaria. (2015). Effect of Leverage on Performance of Non-financial Firms Listed at the Nairobi Securities Exchange. *Journal of Finance and Accounting*. 3. 132. 10.11648/j.jfa.20150305.14.
- Kleinknecht, A., & Mohnen, P. (2002). Innovation and Firm Performance. In *Innovation and Firm Performance*. <https://doi.org/10.1057/9780230595880>
- Kuncoro, Amin & Sudarman (2018) *Metodologi Penelitian Manajemen*. Andy Offset. Yogyakarta
- Kopecka, N. (2015). The Balanced Scorecard Implementation, Integrated Approach and the Quality of Its Measurement. *Procedia Economics and Finance*, 25(15), 59–69. [https://doi.org/10.1016/s2212-5671\(15\)00713-3](https://doi.org/10.1016/s2212-5671(15)00713-3)
- Kraicz, N., & Kraicz, N. (2013). Innovation and firm performance. In *Innovations in Small and Medium-Sized Family Firms*. https://doi.org/10.1007/978-3-658-00063-9_3
- Kaplan, Robert S. & Norton, David P, *Focusing Your Organization On Strategy – With The Balanced Scorecard*, 2nd Edition, Harvard Business Review, 2000.
- Kassim, Nany & Afify, A. & Hassan, Hoda. (2008). Effect of Photoperiod Length on Some Reproductive Traits and Hormonal Profiles in Buffalo Heifers. *Am. Euras. J. Agric. Environ. Sci*. 3.
- Kusuma, H. (2006). Efek Informasi Asimetri Terhadap Kebijakan Dividen. *Jaai*, 10(1), 1–12.
- Lager, T. (1997). Success factors for improvement and innovation of. (May), 158–164. <https://doi.org/10.1108/0957606021041660>
- Laufer, B., & Girsai, N. (2008). Form-focused instruction in second language vocabulary learning: A case for contrastive analysis and translation. *Applied Linguistics*, 29(4), 694–716. <https://doi.org/10.1093/applin/amn018>
- Lee, R., Lee, J. H., & Garrett, T. C. (2019). Synergy effects of innovation on firm performance. *Journal of Business Research*, 99(November 2016), 507–515. <https://doi.org/10.1016/j.jbusres.2017.08.032>
- Lewandowska, M. S., Szymura-Tyc, M., & Gołębiowski, T. (2016). Innovation complementarity, cooperation partners, and new product export: evidence from Poland. *Journal of Business Research*, 69(9), 3673–3681.
- Lugones, G. (2011). Training module for the recollection and analysis of innovation indicators. 39.
- Manajemen, J., & Saleksa, R. G. (2014). Pengaruh Innovation Terhadap Firm Performance Pada Umkm. (3).
- Mantero, M., Tarsia, P., Gramegna, A., Henchi, S., Vanoni, N., & Di Pasquale, M. (2017). Antibiotic therapy, supportive treatment and management of immunomodulation-inflammation response in community acquired pneumonia: review of recommendations. *Multidisciplinary respiratory medicine*, 12, 26. <https://doi.org/10.1186/s40248-017-0106-3>
- Majali, Amal & Alamro, Sameer & Al-Soub, Yahya. (2012). Factors Affecting the Financial Performance of Jordanian Insurance Companies Listed at Amman Stock Exchange. *Journal of Management Research*. 4. 10.5296/jmr.v4i2.1482.

- Marr, B., Gupta, O., Pike, S., & Roos, G. (2003). Intellectual capital and knowledge management effectiveness. *Management Decision*, 41(8), 771–781. <https://doi.org/10.1108/00251740310496288>
- Martin, D. F. (1992). Ultrasound of the alimentary tract. *Imaging*, 4(2), 117–127.
- Martinez-Ros, E. (1999). Explaining the decisions to carry out product and process innovations: The Spanish case. *Journal of High Technology Management Research*, 10(2), 223–242. [https://doi.org/10.1016/S1047-8310\(99\)00016-4](https://doi.org/10.1016/S1047-8310(99)00016-4)
- Masso, J., & Vahter, P. (2007). Innovation and Firm Performance in a Catching-up Economy. *Proceedings from the Conference on Micro Evidence on Innovation and Development (MEIDE)*, (6853), 1–23.
- Medina-Quintero, J. M., Mora, A., & Abrego, D. (2015). Enterprise technology in support for accounting information systems. an innovation and productivity approach. *Journal of Information Systems and Technology Management*, 12(1), 29–44. <https://doi.org/10.4301/s1807-17752015000100002>
- Michie, J., & Sheehan, M. (2003). Labour market deregulation, “flexibility” and innovation. *Cambridge Journal of Economics*, 27(1), 123–143. <https://doi.org/10.1093/cje/27.1.123>
- Mckinley, Patricia & Jacobson, Allison & Leroux, Alain & Bednarczyk, Victoria & Rossignol, Michel & Fung, Joyce. (2008). Effect of a Community-Based Argentine Tango Dance Program on Functional Balance and Confidence in Older Adults. *Journal of aging and physical activity*. 16. 435-53. [10.1123/japa.16.4.435](https://doi.org/10.1123/japa.16.4.435).
- Muharam, H., Andria, F., & Tosida, E. T. (2020). Effect of process innovation and market innovation on financial performance with moderating role of disruptive technology. *Systematic Reviews in Pharmacy*, 11(1), 223–232. <https://doi.org/10.5530/srp.2020.1.29>
- Mulyadi (2008) *Sistem Akuntansi*. Jakarta: Salemba Empat.
- Muluk, Khairul . 2008. *Knowledge Management Kunci Sukses Inovasi Pemerintahan Daerah*. Jatim: Bayumedia Publising
- Neely, A., Mills, J., Platts, K., Richards, H., Gregory, M., Bourne, M., & Kennerley, M. (2000). Performance measurement system design: Developing and testing a process-based approach. *International Journal of Operations and Production Management*, 20(10), 1119–1145. <https://doi.org/10.1108/01443570010343708>.
- Oliveira, L. K., Barraza, B., Bertocini, B. V., Isler, C. A., Pires, D. R., Madalon, E. C. N., ... Ferreira, S. (2018). An overview of problems and solutions for urban freight transport in Brazilian cities. *Sustainability (Switzerland)*, 10(4), 1–14. <https://doi.org/10.3390/su10041233>
- Pa, C. (2004). More and More Companies Seek Out Accounting Professionals With It Skills , Some Universities Now Are Offering a Major in Accounting Information Systems , Which Mixes Topics From Each Area To Provide Students With the Requisite Skills Employers Want . for. 5(3), 29–37.
- Papadakis, V., & Bourantas, D. (1998). The chief executive officer as corporate champion of technological innovation: An empirical investigation. *Technology Analysis and Strategic Management*, 10(1), 89–110. <https://doi.org/10.1080/09537329808524306>
- Pasch, T. (2019). Strategy and innovation: the mediating role of management accountants and management accounting systems’ use. *Journal of*

- Management Control, 30(2), 213–246. <https://doi.org/10.1007/s00187-019-00283-y>
- Puspitawati, Lilis., Sri Dewi Anggadini. 2011. Sistem Informasi Akuntansi. Yogyakarta: Graha Ilmu
- Pasch, T. (2019). Strategy and innovation: the mediating role of management accountants and management accounting systems' use. *Journal of Management Control*, 30(2), 213–246. <https://doi.org/10.1007/s00187-019-00283-y>
- P. Kijkasiwat and P. Phuensane, "Innovation and Firm Performance: The Moderating and Mediating Roles of Firm Size and Small and Medium Enterprise Finance," *J. Risk Financ. Manag.*, vol. 13, no. 5, p. 97, 2020, doi: 10.3390/jrfm13050097
- Ramadani, V., Hisrich, R. D., Abazi-Alili, H., Dana, L. P., Panthi, L., & Abazi-Bexheti, L. (2019). Product innovation and firm performance in transition economies: A multi-stage estimation approach. *Technological Forecasting and Social Change*, 140(December), 271–280. <https://doi.org/10.1016/j.techfore.2018.12.010>
- Radicic, D., & Djalilov, K. (2019). *Journal of Small Business and Enterprise Development*. *Journal of Small Business and Enterprise Development*.
- Rajapathirana, R. P. J., & Hui, Y. (2018). Relationship between innovation capability, innovation type, and firm performance. *Journal of Innovation and Knowledge*, 3(1), 44–55. <https://doi.org/10.1016/j.jik.2017.06.002>
- Rivai dan Basri. 2004. Manfaat Penilaian Kinerja. *Jurnal* <http://journalsdm.blogspot.com/2004/04/penilaian-kinerja-karyawan-definisi.html>.
- Richards, Greg & Wilson, J.. (2007). Tourism Development Trajectories: From Culture to Creativity?, in Richards, G.; Wilson, J. (Eds.). *Tourism, Creativity and Development*. 1-34.
- Rogers, E. M., Singhal, A., & Quinlan, M. M. (2019). Diffusion of innovations. In *An Integrated Approach to Communication Theory and Research*, Third Edition. <https://doi.org/10.4324/9780203710753-35>
- Rosli, M. M., & Sidek, S. (2007). Innovation and Firm Performance : Evidence from Malaysian Small and Medium Enterprises Literature Review Innovation. *Entrepreneurship Vision 2020: Innovation, Development Sustainability, and Economic Growth*, (1980), 794–809.
- Sabherwal, R., Jeyaraj, A., & Chowa, C. (2006). Information system success: Individual and organizational determinants. *Management Science*, 52(12), 1849–1864. <https://doi.org/10.1287/mnsc.1060.0583>
- Saliba de Oliveira, J. A., Cruz Basso, L. F., Kimura, H., & Sobreiro, V. A. (2018). Innovation and financial performance of companies doing business in Brazil. *International Journal of Innovation Studies*, 2(4), 153–164. <https://doi.org/10.1016/j.ijis.2019.03.001>
- Samuelson, P. A., & Nordhaus, W. D. (2009). *Economics* nineteenth edition. New York.
- Sánchez, O., & Camilo, L. (2017). Determinants of Product Innovation Performance: Why Are Some Innovations More Successful than Others? *Economía y Desarrollo*, 158(2), 43–62.
- Sanusi, Anwar (2011) *Metodologi Penelitian Bisnis*. Salemba Empat, Jakarta.

- Santos, W. R., Santos, W. R., Paes, P. P., Ferreira-Silva, I. A., Santos, A. P., Vercese, N, Fernandes, A. P. M. (2015). Impact of Strength Training on innovationl Density in Patients Infected y. *Journal of Strength and Conditioning Research*, 29(12), 3466–3471. <https://doi.org/10.1519/JSC.0000000000001001>
- Sari, N., SE, M., & Purwanegara, H. (2016). The Effect of Quality Accounting Information System in Indonesian Government (BUMD at Bandung Area). *Decision-Making*, 7(2), 301–302.
- Sari, Ratna Chandra dan Zuhrotun. 2006. .Keinformatifan Laba Di Pasar Obligasi Dan Saham: Uji Liquidation Option Hypothesis. *Simposium Nasional Akuntansi 9*, Padang.
- Sartika, D. (1969). Inovasi Organisasi Dan Kinerja Organisasi : Studi Kasus Pada Pusat Kajian Dan Pendidikan Dan Pelatihan Aparatur Iii Lembaga Administrasi Negara. *Jurnal Borneo Administrator*, 11(2), 129–151. <https://doi.org/10.24258/jba.v11i2.196>
- Saunila, Minna. (2017). Understanding innovation performance measurement in SMEs. *Measuring Business Excellence*. 21. 1-16. 10.1108/MBE-01-2016-0005.
- Sdiri, H., Ayadi, M., & Elj, M. (2010). Innovation and Performance: an Empirical Study of Tunisian Service Firms. *Journal of Innovation and Business Best Practices*, 2010, 1–9. <https://doi.org/10.5171/2010.492128>
- Susanto, A., & Meiryani. (2018). The influence of business process and risk management on the quality of accounting information system. *Journal of Theoretical and Applied Information Technology*, 96(9), 2626–2637.
- Smulowitz, S., Becerra, M., & Mayo, M. (2019). Racial diversity and its asymmetry within and across hierarchical levels: The effects on financial performance. *Human Relations*, 72(10), 1671–1696. <https://doi.org/10.1177/0018726718812602>
- Suwardjono. 2005. *Teori Akuntansi Perencanaan Pelaporan Keuangan*. Edisi Ketiga. BPF. Yogyakarta.
- Suarez, F. F., & Utterback, J. M. (1995). Dominant designs and the survival of firms. *Strategic Management Journal*, 16(6), 415–430. <https://doi.org/10.1002/smj.4250160602>
- Suryana. (2014). *Kewirausahaan: Kiat dan Proses Menuju Sukses*. Jakarta: Salemba Empat
- Sternberg, R., & Arndt, O. (2001). The Firm or the Region: What Determines the Innovation Behavior of European Firms? *Economic Geography*, 77(4), 364. <https://doi.org/10.2307/3594106>
- Stacey, G.S. and Ashton, W.B. (1990), “A structured approach to corporate technology strategy”, *International Journal of Technology Management*, Vol. 5 No. 4, pp. 389-407.
- Srimindarti, Ceacilia. 2004. Balanced Scorecard Sebagai Alternatif untuk Mengukur Kinerja. *Fokus Ekonomi*. Vol. 3, No. 1, April. <http://id-jurnal.blogspot.com/2008/04/balanced-scorecard-sebagai-alternatif.html>.
- Soleh, A. (2015). Pertumbuhan Ekonomi Dan Kemiskinan Di Indonesia. *Ekombis Review: Jurnal Ilmiah Ekonomi Dan Bisnis*, 2(2). <https://doi.org/10.37676/ekombis.v2i2.15>
- S. Kowo, A. Akinbola, and O. Akinrinola, “The Impact of Process Innovation on Organisational Performance,” *Acta Univ. Danubius. OEconomica*, vol. 15, no. 2, 2018

- Tange, M. J., Salvaris, E., Romanella, M., Aminian, A., Katerelos, M., Somerville, C., D'Apice, A. J. F. (1997). Additive effects of CD59 expression in Gal knockout mice in vitro but not in an ex vivo model. *Xenotransplantation*, 4(1), 25–33. <https://doi.org/10.1111/j.1399-3089.1997.tb00161.x>
- Teeratansirikool, L., Siengthai, S., Badir, Y., & Charoenngam, C. (2013). Competitive strategies and firm performance: The mediating role of performance measurement. *International Journal of Productivity and Performance Management*, 62(2), 168–184. <https://doi.org/10.1108/17410401311295722>
- Thornhill, S. (2006). Knowledge, innovation and firm performance in high- and low-technology regimes. *Journal of Business Venturing*, 21(5), 687–703. <https://doi.org/10.1016/j.jbusvent.2005.06.001>
- Tanriverdi, H. (2005). Information Technology Relatedness, Knowledge Management Capability, and Performance of Multibusiness Firms. *MIS Quarterly*, 29(2), 311–334. doi:10.2307/25148681
- Tuan, N., Nhan, N., Giang, P., & Ngoc, N. (2016). The effects of innovation on firm performance of supporting industries in Hanoi – Vietnam. *Journal of Industrial Engineering and Management*, 9(2), 413–431. <https://doi.org/10.3926/jiem.1564>
- Vidgren, V., Multanen, J. P., Ruohonen, L., & Londesborough, J. (2010). The temperature dependence of maltose transport in ale and lager strains of brewer's yeast. *FEMS Yeast Research*, 10(4), 402–411. <https://doi.org/10.1111/j.1567-1364.2010.00627.x>
- Wang, Z., & Wang, N. (2012). Knowledge sharing, innovation and firm performance. *Expert Systems with Applications*, 39(10), 8899–8908. <https://doi.org/10.1016/j.eswa.2012.02.017>
- Wadho, Waqar & Chaudhry, Azam. (2018). Innovation and firm performance in developing countries: The case of Pakistani textile and apparel manufacturers. *Research Policy*. 47. 10.1016/j.respol.2018.04.007.
- Wessel, R., Odermatt, J., & Vlastou-Dimopoulou, F. (2019). Organisation for Economic Co-operation and Development (OECD). In *Research Handbook on the European Union and International Organizations*. <https://doi.org/10.4337/9781786438935.00024>.
- Zhang, X., Jian, Y., Li, X., Ma, L., Karanis, G., & Karanis, P. (2018). The first report of *Cryptosporidium* spp. in *Microtus fuscus* (Qinghai vole) and *Ochotona curzoniae* (wild plateau pika) in the Qinghai-Tibetan Plateau area, China. *Parasitology Research*, 117(5), 1401–1407. <https://doi.org/10.1007/s00436-018-5827-5>